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ALABAMA POULTRY

THE OFFICIAL MAGAZINE OF THE ALABAMA POULTRY & EGG ASSOCIATION

Alabama's Poultry Industry – Keeping Shelves Stocked During Pandemic

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President's Message

I would like to start by saying what an honor it has been to serve you as president. This year has been challenging. As I write this letter, the world is enduring a challenge the likes of which none of us have ever witnessed.

COVID-19 has affected all of us. Our normal lives have been altered in many ways — how we do business, where we can go, how we eat and how we interact with people we know and love. With the pandemic affecting every county in Alabama, it was inevitable that our poultry family would be impacted in some manner. My heart and prayers go out to all of those who have been affected by this disease.

The poultry industry is strong, and we are blessed to be a part of an industry that is critical to feeding this great nation and the world. We are part of our nation's essential infrastructure, and with that comes great responsibility. We have faced uncertain times as an industry before, and we have emerged better and stronger. I'm certain we will rise to the occasion once again.

Please stay focused on your health and the health of everyone around you. Follow social distancing guidelines, wash your hands, use hand sanitizer, don't touch your face, cover any sneeze or cough and protect those around you who are the most vulnerable. We are all in this fight together, and we will win if we all follow the rules and work together.

Not surprisingly, the pandemic has led to a few changes in our schedule of events for this year. Our annual Evening of Fun, for instance, has been postponed to Sept. 5, 2020, and our bass and golf tournaments also will be rescheduled.

I would like to thank the staff at AP&EA for the wonderful job you do. In challenging years like this one, you always step up and make it work. You are a great team. Thank you for all you do for our industry and our association.

In closing, I urge all of you to remain vigilant regarding your safety and the safety of the people around you. Take care of yourself, your loved ones and those you work with every day. Thank you for all you do to support the food supply. We all depend on each other, and together we will win this fight.

Sincerely,

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State's Poultry Industry Remains Strong Amid Virus Crisis

By Caleb Hicks

As the COVID-19 pandemic spread across the U.S., poultry processing facilities implemented numerous health measures to keep employees safe. Shown here are partitions to keep processing line employees separated.

In the midst of a national health and economic crisis, Alabama's largest agricultural industry has remained at work providing food for Americans.

The Alabama Poultry & Egg Association, or AP&EA, along with industry partners, farmers, processors and related industries are considered essential in agricultural food production.

AP&EA's Johnny Adams said the organization has worked closely with state and local government officials to keep Alabama's poultry industry open for business.

"The poultry industry has been declared essential, critical infrastructure by the U.S. Department of Homeland Security as well as Alabama Gov. Kay Ivey," said Adams, the organization's CEO. "We take that responsibility seriously. Our affiliated farmers and poultry companies are working hard to keep employees safe as they continue to provide the nutritious, delicious food American consumers are accustomed to."

As an essential part of America's food supply, the poultry industry has implemented strict health measures to ensure the safety of employees.

David Thompson of Pilgrim's said his company and others have enacted multiple health protocols for employee safety as it continued to produce safe protein.

"We have enhanced safety measures, health protocols and worker benefits to keep our workplaces, team members and products safe," said Thompson, head of operations for Pilgrim's Fresh Foodservice. "We are communicating directly with our team members and following guidance from the U.S. Centers for Disease Control and Prevention, medical professionals and local health departments every step of the way."

Thompson acknowledged Pilgrim's employees' loyalty during such uncertain times.

"Every day, thousands of committed team members show up to Pilgrim's production facilities in Alabama and across the country to help our communities and our country face this crisis," he said. "The Pilgrim's team is dedicated to keeping food on local grocery store shelves at a time when many Americans are furloughed, unemployed or sheltering in place, and that's something we greatly appreciate."

Other poultry processors have added similar safety protocols. Matthew Herman, senior vice president of

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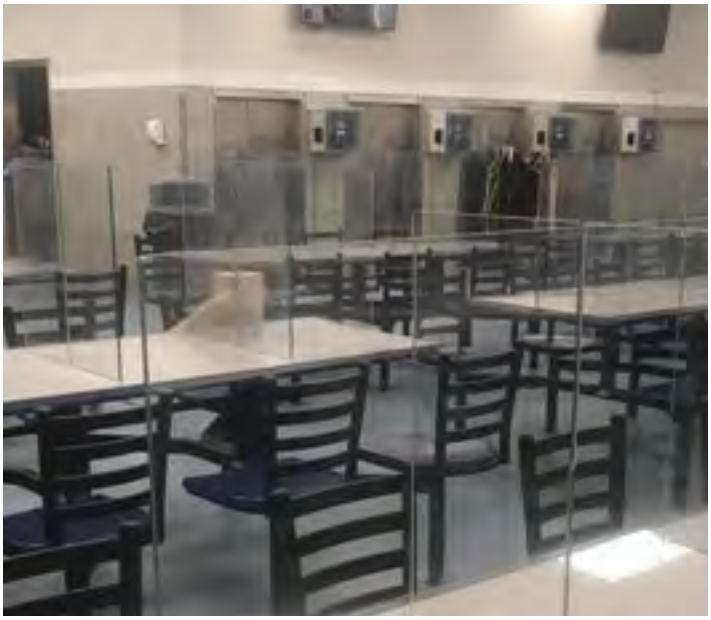

Processing facilities updated health measures to include partitions between employees in the processing line and in break areas.

Fresh Operations for Koch Foods, said implementing technology such as walk-through temperature evaluations and screen guards between line employees and public spaces are vital and are likely to become industry standards.

"Temperature screenings of employees have become important in recent months," Herman said. "I don't think that's going away, and it'll be here to stay. We have to continue to find better ways to identify if someone has an elevated body temperature, and that's something we can utilize year-round."

As poultry processors aim to keep employees safe, Alabama Department of Agriculture and Industries Commissioner Rick Pate stressed that farmers and poultry companies are striving to provide safe food for American families.

"As we face the challenges associated with the coronavirus outbreak, farmers and processors serve as unsung heroes, working behind the scenes daily to put food on our tables," Pate said. "Farmers carefully follow biosecurity measures on the farm, while processors and distributors follow strict food safety standards to keep the food supply chain operational."

Pate also reassured the supply of poultry is plentiful and reiterated its vital role in the state's economy.

"The public can be assured we have a safe, sustainable and abundant food supply, and that will continue even during this crisis," he said. "Poultry is Alabama's number one agricultural industry. It is essential to our economy, and it's important citizens know agriculture continues to operate unimpeded."

Half of all poultry in the U.S. is processed for the foodservice industry, according to the National Chicken Council. That market dropped drastically as restaurants, hotels and schools closed.

Decreased demand for poultry by restaurants has caused production adjustments at plants such as Koch Foods, which primarily processes poultry for foodservices, but Herman is confident production will be back at target when demand returns.

"I strongly feel things will even out, because people will want to get out and eat with their friends and families once all of this is over," Herman said. "The foodservice industry will need poultry for their customers, and we'll be ready."

Alabama's poultry industry is committed to keep shelves stocked during the COVID-19 pandemic.

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Auburn University Students Tour Alabama, See State's Agricultural Diversity

'A lot of people don't know what we do here on the farm and the work that goes into it. These students are willing to further their education rather than spending a week going on a normal vacation.'

By Caleb Hicks

AP&EA Past President Dorman Grace talks with Auburn agriculture students who are participating in the second Alabama Ag Expedition. From left are Jud Grace; poultry science freshman Andrew Walker; Past President Dorman Grace; and agriscience education junior Kendall Holmes.

Ever wanted to tour the state of Alabama in less than seven days? Nearly 30 Auburn University agriculture students had that opportunity during their spring break March 8-13 as part of the second Alabama Ag Expedition sponsored by the Alabama Farmers Federation Wheat and Feed Grain Division.

Setting off on a more than 1,000-mile trek across the Yellowhammer State, participants visited poultry, horticulture, beef, row crop and catfish operations and made a pit stop at Alabama beaches. The expedition is designed to give students a glimpse of the state's diverse agricultural industry and provide invaluable learning experiences.

On the poultry front, students toured a rainwater collection project and a solar-powered farm in Cullman and made a stop at Grace Farms, a poultry, cattle and row crop operation in Jasper.

Auburn agriscience education junior Kendall Holmes, who grew up on a poultry farm in Wadley, Alabama, said the trip gave her insight on modern technology in the industry and how to possibly implement what she learned into the classroom one day.

"I'm a visual learner, so it's been really cool to see multiple ways of how farms can be updated in the industry," she said. "Seeing what other people are doing on their farms and learning more about the agricultural industry will definitely come in handy when teaching future students the vital role agriculture plays in our lives."

Andrew Walker, a freshman majoring in poultry science at Auburn, said the weeklong tour also offered excellent networking opportunities.

"It's great to meet so many people in different backgrounds in this industry," the Baileyton, Alabama, native said. "On this trip, you can sit and talk with people you've never met before, and it's important to make those connections now. One day, I may want to start my own farm, and these connections can certainly help."

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Grace shares his farms' history with expedition participants.

Walker's family, too, is in the poultry business, and he said the tours of innovative poultry operations that run on solar power and harvest rainwater were especially beneficial and timely, given the shift toward more sustainable poultry production practices.

"I think this trip is a really good opportunity for each of us," he said. "I haven't talked to one person who regrets coming on this trip, and seeing the technology being utilized in the poultry industry I've seen the last couple of days makes me really excited for the future."

Alabama Farmers Federation Wheat and Feed Grain Division Director Carla Hornady said the second expedition was as big a success as the 2018 tour, providing students the opportunity to learn outside the classroom.

"This trip allows students to learn and see Alabama's agricultural industry outside of their normal environment," Hornady said. "We're grateful to be able to provide students with this option and hope to see their faces in the future, solving problems and creating solutions in the industry."

Alabama Poultry & Egg Association Past President Dorman Grace echoed the important role the expedition could play as students begin their college and career journeys.

"Not only is this trip important for students, it's important for everybody," said Grace, owner of Grace Farms. "A lot of people don't know what we do here on the farm and the work that goes into it. These students are willing to further their education rather than spending a week going on a normal vacation."

Grace gave students advice as they prepare for the next step in their lives.

"Just pull that seed out, plant it and nourish it, then, go out and conquer the world," he said. "Someone has to take care of us when we get older, and we're looking to y'all to be the future in the ag industry."

Nearly 30 Auburn agriculture students participated in the expedition.

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Port Gains Major Poultry Export Capacity

MTC Logistics' $61 million frozen food facility at the state port quadruples capacity for poultry exports and highlights Mobile's assets as a distribution hub.

MTC Logistics, one of the nation's oldest and largest temperature-controlled logistics facilities, is on track to have the largest cold storage facility of its kind in Alabama.

Privately owned and founded in 1928, the Baltimore-based company is building a facility in Mobile — its first plant beyond its northern roots. A $61 million investment adjacent to the Alabama State Port Authority container terminal, which is operated by APM Terminals, the cold storage facility will encompass 12 million cubic feet, including 40,000 racked pallet positions of storage. Services will include blast freezing, port drayage and LTL (less than truckload) consolidation, just as it did for 90-plus years, only this time, in Mobile's port.

The new plant will offer a seamless supply chain focused on global commerce.

"MTC is a good company with a first-rate business model," said Alabama State Port Authority Director and Chief Executive Officer Jimmy Lyons. "We're extremely pleased to add this high caliber company to our portfolio of port services. MTC will more than quadruple available capacity for our export poultry producers, as well as attract new shippers."

Lyons also noted that currently the docks ship about 300 containers of poultry products monthly. With the addition of MTC, the number could reach 1,000 to 1,200 a month. "We think it will start off with great success."

Mobile Mayor Sandy Stimpson echoed Lyons' sentiments in a written statement to Business Alabama: "We are pleased and proud to welcome MTC Logistics to Mobile. They are a growing, family-owned business, and we have enjoyed the opportunity to build a relationship with them.

"This project represents a big step for MTC and the future of their business. The fact they chose to make this investment in Mobile is validation of our strategy to attract distribution centers connected to the Port of Mobile."

The primary products are frozen poultry export and seafood import in an international, temperature-controlled distribution center. For the company, with distribution centers in Baltimore, Philadelphia and Wilmington, Delaware, adding Alabama's Port City was a leap of faith greatly enhanced by several years of intense analysis.

"We were looking to expand our footprint for some time," said MTC Vice President of Sales Ernie Ferguson. "We specialize in logistics for frozen/refrigerated food, and some of our customer base wanted us to expand locations."

He noted the company ran a 'SWOT' (Strengths, Weaknesses, Opportunities and Threats) analysis, which examined locations from Charleston on the East Coast all the way around the country to Houston.

"Mobile came out as an ideal location, with its port and close proximity to two interstate highways (I-65 and I-10) and an excellent rail system," Ferguson said.

As for logistics, the company was pleased with the Port of Mobile's overall success. "It has excellent potential for us," Ferguson said. "In addition to quick access to sea routes and a good interstate highway network, it has logistically favorable access to Texas, Georgia and Florida. All of this is from a centralized standpoint in Mobile.

"In addition, growth in the Southeast is important for us, and Mobile came out as the ideal choice of what we were looking for."

Thus, the Baltimore-to-Mobile journey began. On the Alabama end, Team Mobile included the Alabama State Port Authority, the City of Mobile, the Mobile Area Chamber of Commerce, Alabama Power Co., APM Terminals and the Alabama Department of Commerce.

"This was not a quick process," said Hollie Pegg, Commerce's assistant director of business development. "MTC is a family business relatively consolidated in the Northeast. For the company to take this move South was a tremendous

step and, for all of us, a two-year process."

Pegg noted that her team emphasized the port, its growth and location advantages. "We can turn cargo around quicker than is done at some of our competition's locations."

Shelby Zaricor, director of business development at the Mobile Area Chamber of Commerce, added, "Initially, when MTC considered Mobile for its new location, they were not considering our port. Once the company learned of the capabilities to export from the Port of Mobile, their project size doubled. I think what sets us apart from competitors is our 'triple threat' – rail, sea and roads – within minutes of MTC's new location."

The project also has a hometown connection. Brooks Royster, MTC's vice president of international supply chains, will oversee the Mobile project. Royster was born in Gulfport, Mississippi, grew up in Mobile, graduated and moved away in 1983. The MTC project is bringing him home.

"Our analysis, which took over a year, rendered an unemotional business decision that Mobile was the right place to be," said Royster. "Not only will Mobile have the largest of its kind of plant in our company and the state," he said, "there is no facility like this, this size, in the United States."

Basically, frozen food, in its almost 300,000-square-foot freezers, is stored on an automated racking system that slides together or separates as needed, creating aisles. It creates aisles on demand rather than static non-movable shelving. The unique system allows maximum use of storage space in the two-story plant, which will be two football fields long and one football field wide. There is no wasted space.

In addition, MTC will implement its industry-leading customer web portal. Developed in-house over 20 years, the electronic data system allows customers inventory visibility, remotely. With an internet connection, orders can be placed, analytics run and reports generated from anywhere on Earth. MTC Logistics estimates 50 to 75 employees slated for startup, projected for fourth quarter 2020. Positions include management, warehouse workers, clerical and more. Mobile is expected to enjoy peripheral employment as well, including transportation jobs (trucking-loading), fuel centers and related industries.

Site construction of MTC Logistics, a wholly owned subsidiary of Hoffberger Holdings Inc., was projected to accelerate during 2020 first quarter to meet the somewhat ambitious fourth quarter opening.

"This building is very significant," Royster said. "It is going to be big for us, the port, the city of Mobile and the economy. We are absolutely thrilled to be doing it."

MTC Logistics' motto applies to locations in Baltimore, Philadelphia, Delaware, and soon, Mobile, Alabama — "Warm Service. Delivered Cold." And, Mobile is welcoming its new frozen assets.

Emmett Burnett and Mike Kittrell are freelance contributors to Business Alabama. Burnett is based in Satsuma and Kittrell in Mobile.

Applying Soil Amendments of Organic Origin to Agricultural Land

► **Organic soil amendments can be a beneficial and cost-effective alternative to fertilizers. But you need to know the right ones to apply to your land. Learn approved applications of various organic matter.**

Soil amendments of organic origin, or SAOO, are gaining popularity among Alabama farmers looking for alternatives to costly fertilizers. Organic amendments provide essential nutrients to plants as well as help to rebuild soil organic matter, improve microbial activity, enhance water infiltration, improve water-holding capacity and promote soil aggregation.

The qualities of SAOO vary tremendously due to differences in their sources, levels of processing, storage, etc. It is important, therefore, that farmers understand these differences and the SAOO options that are available in order to make wise selections for their land.

Biosolids

Biosolids are the primary organic **solid byproduct** produced through treatment of municipal/domestic sewage sludge by municipal wastewater treatment facilities. Biosolids vary widely in their physical form and appearance, depending on the moisture content. Some biosolids look like black slurry or liquid suspension (less than 4 percent solid); others look like moist earthlike material (less than 50 percent solid); and still others are drier in appearance (more than 90 percent solid).

In recent years, recycling efforts have increased, leading to disposal of treated biosolids on farm, forest or mine land. The treatment is done primarily to reduce pathogen densities and vector attraction potential as well as decrease metal concentration in accordance with the regulatory requirements of the Environmental Protection Agency's Title 40 Part 503 of the Code of Federal Regulations, or CFR. The treatment process is also known as stabilization and is achieved through any of these methods: (1) adjustment of pH by addition of quick lime to wet sludge, (2) digestion, (3) composting, or (4) heat drying.

Depending on the degree of treatment and pathogen densities, biosolids are categorized into Class A biosolids, Class B biosolids and Exceptional Quality biosolids. Although the three types of biosolids are safe for land application, additional requirements are imposed on Class B biosolids.

Class A Biosolids

Class A biosolids are treated to an extent where no detectable pathogens are present. However, they must meet the **ceiling concentrations of metals** as defined in CFR Part 503. This is defined as the maximum concentrations of metals that can be present in biosolids at any given time for land application (Table 1). Sewage sludges that do not meet these requirements are not considered biosolids and may not be land applied.

The total lifetime applications of biosolids to a field are also limited by the cumulative loading of regulated metals as indicated in Table 1. Cumulative loading refers to the total amount, in pounds per acre or kg per hectare, of each metal from all lifetime applications of biosolids to a field. When the total amount added for any one of the regulated metals listed in Table 1 reaches the limit, biosolids application to that field should be stopped. Selected properties of Alabama-generated municipal biosolids are presented in Tables 2 and 3.

Class B Biosolids

Class B biosolids have low levels of pathogens but have greater than class A biosolids. In order to qualify as Class B biosolids, the pathogen density or colony-forming units per gram of total dry solids or (CFU/g) TS) should be less than 2,000,000 CFU/g TS or have undergone pathogen treatment processing such as aerobic or anaerobic digestion, air drying, composting, lime stabilization or heat treatment. The pathogens in Class B biosolids eventually die off when exposed to the environment. The metal concentrations in Class B biosolids should be below the ceiling limit (Table 1) as described in CFR Part 503. Certain site restrictions apply when using Class B biosolids. One such restriction is a waiting period after application of a Class B biosolid. For example, food crops, feed crops or fiber crops shall not be harvested for 30 days after Class B biosolids application. Similarly, ani-

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Table 1. Commonly Present Metals in Biosolids and Ceiling Concentrations and Cumulative Loading Cutoff Rates for Agricultural Lands

Metal	Ceiling Concentration (mg/kg)	Cumulative Pollutant Loading Rates (kg/hectare)
Aresenic	75	41
Cadmium	85	39
Copper	4,300	1,500
Lead	840	300
Mercury	57	17
Molybdenum	75	NL
Nickel	420	420
Selenium	100	100
Zinc	7,500	2,800

NL = No limit Source: US EPA, 1993 and 1994

mals shall not be grazed on a site for 30 days after a Class B biosolids application. Public access to land with a high potential for public exposure is also restricted for one year after a Class B biosolids application. For a full list of restrictions, please refer to the EPA's Guide to Part 503 Rule, Chapter 2, Land Application of biosolids (www.epa.gov/sites/production/files/2018-12/documents/plain-english-guide- part503-biosolids-rule.pdf). Find selected properties of Alabama-generated municipal biosolids in Tables 2 and 3.

Exceptional Quality Biosolids

Exceptional Quality biosolids meet stringent pathogen and vector attraction reduction requirements and have lower metals concentration requirements than either Class A or Class B biosolids. Vectors are organisms such as flies, mosquitoes, rodents, birds, etc., that can transmit diseases directly to humans or that play a specific role in the life cycle of a pathogen as a host. Vector attraction reduction refers to processing that makes the biosolids less attractive to vectors, thereby reducing the potential for transmitting diseases. Exceptional Quality biosolids products are considered safe and may be used without site restrictions.

Following are important factors to consider when choosing biosolids as an organic amendment

- Biosolids contain significant amounts of phosphorus (6 to 7 percent P_2O_5 dry basis), organic matter (50 to 70 percent) and micronutrients (boron, chlorine, copper, iron, manganese, molybdenum and zinc) that can benefit crop production. However, the nitrogen (N) value of biosolids is highly variable and depends on the pH of the substrate. Rates applied to meet the N needs of crops will result in excess application and accumulation of phosphorus in soil (four to five times more P than is needed by the crop). Monitor soil phosphorus levels in fields receiving biosolids where the application rate was based on the crop's N needs. Most of the N in biosolids is in organic form and becomes available to crops slowly over time through mineralization.

- Lime-stabilized biosolids have high pH (>8). Application of lime-stabilized biosolids on high pH soils can reduce the availability of some micronutrients (Fe, Cu, Zn and Mn) to plants. Farmers should avoid using lime-stabilized biosolids on high pH soils (pH>7.5). However, lime-stabilized biosolids can help neutralize the acidity problem in low pH soils (pH<5). Lime-stabilized biosolids have a 30 percent total neutralizing value and are effective in raising the soil pH when incorporated.

- Repeated application of biosolids over many years will result in buildup of regulated metals in the soil. Since metals do not volatilize like N, they tend to persist in the soil. The total lifetime applications of biosolids to a field are limited by the cumulative loading of regulated metals listed in Table 1. Test your soil to determine background concentrations of the metals (Table 1) already present in the soil and keep track of application rates.

- Since biosolids are usually supplied and applied at no cost to the farmer, the following cautions should be taken:
  - Apply the recommended rate not to exceed the cumulative metal loading rate.
  - Maintain a detailed record of application rate, place and application timing.
  - Restrict biosolids applications in land that is prone to runoff or leaching.
  - Observe the Alabama Department of Environmental Management recommended setback distances for property lines, public use areas, wells, roads, streams, exceptional wetlands and regional groundwater tables.

Table 2. Properties of Municipal Biosolids Generated in Alabama: Class B Biosolids from 28 Municipalities

Variable	Mean	Standard Error	Minimum Value	Maximum Value
Total N (%)	3.7	0.4	0.04	9.1
NH_4-N	0.8	0.2	<0.01	4.2
NO3-N	0.2	0.1	<0.01	1.5
Total P_2O_5 (%)	6.0	0.8	<0.01	43.7
Total K_2O (%)	Not determined			
Solids (%)	21.9	4.6	1.6	91.0
pH	7.4	0.80	6.9	9.6
As (mg/kg)	5.7	1.3	0.3	44
Hg	2.5	0.4	0.1	14.6
Se	4	4	<1	40
Mo	18	2	2	58
Cu	355	53	11	1830
Zn	762	91	57	2320
Cr	35	5	1	126
Pb	67	15	5	430
Cd	6.0	2.2	<0.1	77.6
Ni	30	5	1	192
Fecal coliform no.	65000	23000	3	370900

Table 3. Properties of Municipal Biosolids Generated in Alabama: Class A Biosolids from 5 Municipalities

Variable	Mean	Standard Error	Minimum Value	Maximum Value
pH	12.7	0.1	12.6	12.7
Fecal coliform no.	36	21	14	79

- Monitor for phosphorus buildup in fields with a history of multiple applications. A nutrient management plan can use biosolids on a regular basis as the only source of plant nutrient for your operation.

- One issue that results from biosolids application is the nuisance odor. Most odors in biosolids are caused by volatile organic compounds, sulphur-containing compounds (H_2S) and ammonia (NH_3) impacts vectors that are carriers of pathogens can be. Odor problems can be reduced by knifing-in the biosolids or tilling the soil to incorporate the biosolids. Rain can help disperse the odor, but dry and hot conditions immediately after rain can further increase the odor. Farmers must be keenly aware of such situations when applying biosolids.

- Apply high-quality biosolids produced by a well- operated treatment plant and applied by a reputable company. Request a laboratory analysis of the biosolids spanning a one-to two-year period. Look for nutrient levels, low trace metal concentrations and low fecal coliform numbers. When in doubt, contact your fellow farmers who have used the biosolids from the company or contact ADEM to inquire about the track record of the treatment plant producing the biosolids and the company doing the application. Carefully check all application rate calculations to ensure that the correct amount is being applied.

- Avoid application to agricultural land any sewage that was not treated or stabilized at a wastewater treatment facility. Untreated sludge cannot be considered biosolids unless it meets or exceeds the quality requirements in three areas: (1) low concentrations of nine metals listed in Table 1, (2) low pathogen density equivalent to Class A biosolids, and (3) low vector attraction potential. Industrial sludge should not be confused with municipal sludge and should not be applied to agricultural lands unless marked safe and in compliance with EPA standards.

Animal Manure

Animal manure has been used as a soil amendment since ancient times. Animal manure contains feces and urine excreted by animals. Depending on the type of animal operation, animal manure can be either solid or liquid and may contain bedding materials. One example of animal manure that has bedding material is poultry manure. Poultry manure from the various segments of production differs widely in characteristics, appearance, moisture content and nutrient value. Common poultry manure types are explained below.

Poultry litter is a mixture of poultry feces, spilled feed, feathers and bedding materials (peanut hulls, wood shavings, sawdust, etc.). Poultry litter is an excellent soil amendment and slow-release fertilizer for row crops, pastures and hay fields. Poultry litter can improve soil tilth, reduce soil compaction and add organic matter and nutrients to increase soil fertility and productivity. Poultry litter can be applied either as fresh or composted manure.

The typical nutrient content of litter is provided in Table 4. When using poultry litter as a nutrient source, farmers should consider the proper application rate, which depends on the litter nutrient analysis, soil test report, and crop nutrient requirements. Broiler litter can be further categorized into the following:

Broiler litter from total cleanout. Broiler litter is the manure that comes from chickens raised for meat. To limit buildup of wet manure and promote bird health, poultry farmers typically do a total cleanout of their poultry houses after eight to 10 flocks (each flock is typically 42 to 55 days). This litter contains droppings of floor-raised chickens, along with bedding (usually wood shavings, peanut hulls or sawdust) feathers and wasted feed.

Broiler cake. Many poultry farmers do not perform a total cleanout due to the cost of bedding material and labor involved. Instead, after three or four flock cycles, these farmers remove from the surface two to four inches of fresh manure combined with bedding materials and spilled feed. This process is known as decaking or crusting. The decaking

is performed using specialized equipment called a decaker, which is pulled by a tractor. The decaker separates the crusted cake from the bedding material by passing the cake over a grate that allows the fine materials to pass through and return to the floor while collecting the larger aggregations of cake in a hopper.

Broiler stockpiled litter. A stockpile litter consists of litter either from total cleanout or broiler cake stored in a pile under cover on an impervious surface for later use.

Composted broiler litter. Many farmers use fresh broiler litter and convert it into a uniform, stable, odorless, pathogen-free, soil-like material through a process known as composting. The composted litter is marketed to nursery owners, organic farmers, vegetable farmers, homeowners and golf courses. Composted litter improves soil quality by adding organic matter, nutrients and beneficial microorganisms.

Pullet litter. The manure that comes from a total cleanout of pullet houses is called pullet litter. A pullet is the technical term for a young female chicken that has not begun to lay eggs. The pullets are raised for approximately 20 to 22 weeks until they are taken to a breeder hen farm. The quality of litter coming from pullet houses is lower than that of broiler houses, primarily because the pullets are fed a limited diet and the bedding materials consist of deep shavings. Sometimes pullet houses are cleaned out after every flock or every two flocks, depending on the presence of disease and integrator requirements.

Breeder litter. The manure that comes from breeder houses is referred to as breeder litter. The breeder farm receives pullets (young hens) that are approximately 20 to 22 weeks old. These hens produce fertile eggs for a hatchery until they are 50 to 65 weeks old, after which they are sent to slaughter. The eggs go to a hatchery where they are incubated to produce broiler chicks. The manure produced consists of bird droppings, spilled feed and bedding material similar to broiler litter. The average nitrogen content of breeder manure is almost half that of broiler litter, but their calcium content is two to three times greater than broiler litter.

Layer high-rise cleanout. Layers are the chickens that are raised for commercial egg production. The layers are kept in offset-stacked cages in the upper floor of the structure. The

Table 4. Nutrient Content (Dry Basis) of Commonly Used Poultry Manure					
	N	P_2O_5	K_2O	Ca	Mg
Broiler litter (after 5 flocks)	3.39	3.40	2.42	2.57	0.75
Broiler litter (after 10 flocks)	3.78	4.07	3.28	3	0.89
Broiler cake	3.72	3.96	2.98	2.85	0.8
Litter cleaned out every 3 years	3.84	3.89	2.69	2.61	0.76
Litter stockpiled (dry stack)	3.56	3.86	2.87	2.94	0.88
Compost	3.73	4.21	2.58	3.1	0.72
Pullet	2.8	4.83	2.40	3.5	0.8
Breeders	2	3.22	2.52	6.5	0.8
Layer (caged)*	1.5	1.3	0.5	6	0.4

* Source: Nutrient Content of Fertilizer Materials (Extension publication ANR-0174
Data source: International Journal of Poultry Science, 2019, DOI: 10.3923/ijps.2019.

droppings from the birds are collected through a manure collection belt system or slot in the floor into the storage area or manure pit below. There are several different styles of cages, such as multi-level buildings or cage-free buildings, each with a unique manure collection systems (e.g., manure collection belt system). In high-rise systems, manure is accumulated for several months before it is cleaned out and stored in a covered storage structure area. The manure is either solid or semi-solid but dries out during the storage.

Layer lagoon sludge. When manure from layer houses is collected often, the manure is either scraped or flushed as slurry. The manure from these systems is stored in a separate earthen or concrete structure outside of the housing facility. Many of these storage structures are managed as anaerobic lagoons to treat the waste.

Lagoon effluent. Many layer houses also have egg wash facilities in a separate building. The egg washers remove manure and other debris, such as shells, broken eggs and other organic materials and pump it to large holding ponds. The liquid is known as lagoon effluent.

Waste from poultry processing facilities. Chicken processing facilities generate poultry byproducts (offal), which are managed differently than the chicken litter produced from broiler houses. Four kinds of byproducts are mainly produced at the processing facilities: blood, feathers, chicken heads and non-edible viscera. A fifth byproduct (solids screened to a size 0.5 mm) is also separated from the screened wastewater used during processing.

All these byproducts are picked up by a third-party rendering company that transforms them into pet food, blood meal, feather meal, animal fat-based biodiesel, etc. The smaller solid particles that are left in the wastewater are separated using various treatment technologies, and the skimmings are rendered or picked up by third-party vendors who land apply it to fields. The wastewater stream undergoes anaerobic or aerobic treatments before being discharged or used for irrigating nearby fields.

Animal mortality compost. A common method of dealing with normal animal mortality is to compost. Chicken litter, a carbon source like wood shavings, and the animal carcasses are layered in a composting bin. Over the course of several weeks, the carcasses decompose. The bin is usually mixed or turned with the compost placed into a secondary bin to complete the process.

Composting of carcasses requires the correct ratio of carbon and nitrogen, along with adequate moisture. When done correctly, there should be no evidence of the carcass in the final product.

Composted animal mortality is to be spread on the farm of origin and requires a permit from the state veterinarian in order to be moved off that farm. The composting bins are typically included in the dry-stack storage barn for ease of loading and cleaning out on the impervious surface.

Following are important considerations when choosing poultry litter as an organic amendment:

- Poultry litter can vary both in moisture content and nutrient concentration due to numerous factors, such as production conditions, age of bird, diet, number of birds per flock, bedding material type, litter storage and handling methods. Farmers should consider sending representative samples to a reputable laboratory to determine the level of nitrogen (N), P_2O_5 (P), and K_2O (K) before applying to agricultural fields.
- If farmers are considering litter application to meet the N needs of the crop, they should pay attention to the phosphorus levels in soil. The plant P removal rate is three to four times less than N removal. Repeated applications of litter can lead to buildup of P in soil over time. Additionally, most N in litter is in the organic form (70 to 85 percent) that requires mineralization before becoming available to plants. Mineralization is a slow process and varies between soil types, soil moisture content, temperature and method of application. Around 40 to 70 percent of the total nitrogen is available during the first year, whereas the remaining nitrogen requires more than one growing season to be plant available.
- Around 50 to 60 percent of phosphorus and 75 to 80 percent of potassium in litter is considered to be plant available immediately after application or after rainfall events. However, P is highly reactive and gets tied up by soil quickly, especially for soils that are rich in iron and aluminum oxides. If row crop or hay farmers are considering litter application to meet the plant P and K needs, they should avoid applying litter several months ahead of planting.
- It is a required practice to keep records of manure applications and off-site transfers. Accurate records will document the proper use of animal manure and serve as evidence for regulatory authorities, if needed. Good environmental stewardship practices related to manure usage involve avoiding excessively high application rates and basing application rates on soil test reports, manure analysis reports and crop nutrient requirements.
- It is also a good practice to keep the litter spreader calibrated to deliver the right rate as accurately as possible. Avoid applying litter on steep lands having slopes more than 10 percent. Observe ADEM-required setback distances, and refer to the guidance document at www.adem.state.al.us/programs/water/waterforms/ADEM-NRCSAFOBufferSum.pdf. Do not apply litter if a significant rainfall event is predicted within 72 hours. Also, do not apply litter on a windy day to avoid conflict with neighbors.

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Cleaning Debris Out of Evaporative Cooling Pads

Jeremiah Davis, Kelly Griggs, Jess Campbell, Dennis Brothers, Carson Edge – Auburn University College of Agriculture

National Poultry Technology Center

As the weather heats up this spring, we start to get questions about houses not being able to pull a wind speed or that the houses are running at high static pressure. Several factors in the house can cause these issues; however, this article will focus on cleaning debris out of the evaporative cooling pads. Many growers will discuss how clean their pads appear to be from the outside of the house. While there is no scaling or debris on the outside surface and the first inch of flutes may look clean, we need to go inside our houses to get a better representation of pad cleanliness. Around noon, when the sun is at its peak, go inside your houses with the tunnel doors/curtains fully open, close the end-doors and shut off the lights. How do your pads compare to the three evaporative cooling systems below: Figure 1, 2 or 3?

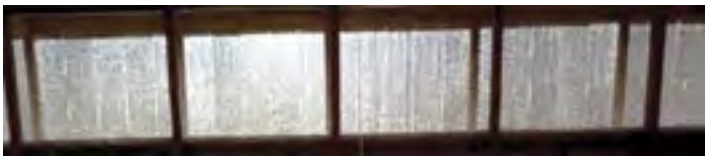


Figure 1: View of evaporative pads from inside a house with the lights off. This evaporative system has new evaporative pads that are less than a year old. You see minimal blockage in the flutes. Average wind speed was approximately 325 fpm through the pads.

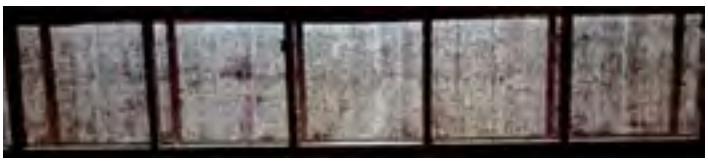


Figure 2: This evaporative system has 10-year-old evaporative pads that have been cleaned with high-pressure water. You can see a small portion of flutes clogged with debris and patches that were missed during cleaning. Average wind speed was approximately 310 fpm through the pads.

Figure 3: This evaporative system has 10-year-old evaporative pads that have been cleaned with high-pressure water sometime earlier in the year. It is easy to see where the pads were cleaned and where the pressure washer missed. This grower missed the bottom 12-in of each pad as well as a complete 5 x 5 ft. section (marked by X) on the left. Wind speed was 150 fpm through the missed section. Average wind speed was approximately 250 fpm through the pads.

A few years ago, we measured static pressure down the length of a 66 x 560 ft. broiler house during tunnel ventilation. We plotted the static pressure (solid black line) as a function of house length (Fig. 4). Static pressure was lowest at the front of the house as air enters and increased with house length until the fans were reached and the air exited. Static pressure at the controller measured 0.15 inches (in) water column (WC) while the fans were operating under static pressures that were closer to 0.20 in WC. The two dashed lines represent approximate increases in static pressure of 0.02 and 0.04 in WC, respectively, due to pads getting dirty and clogged. As the pads get more clogged, the static pressure down the house increases and cause the fans to work harder while providing lower wind speeds across the birds!

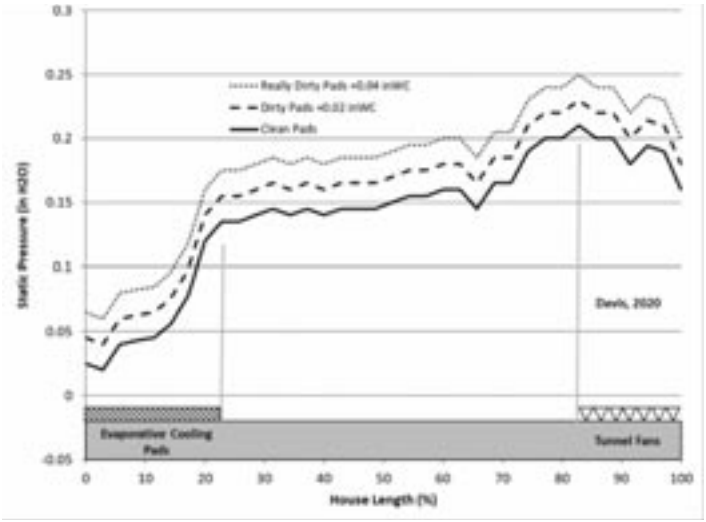


Figure 4: We measured static pressure (black line) in WC as a function of house length (percentage) for a 66 x 560 ft modern tunnel ventilated broiler house. The two dashed lines represent an approximate increase in static pressure of 0.02 and 0.04 in WC due to pads being dirty and restricted. Dirty pads will cause the fans to work at higher static pressures and will reduce wind speeds across the birds.

Figure 5 below maps the measured wind speed in feet per minute (fpm) at bird level for the same 66 x 560 ft. broiler house (Luck et al., 2017). Air enters the evaporative pads on the left and exits through the 14 tunnel fans on the right. The darker blue colors represent slow wind speeds and still air while the lighter colors represent high wind speeds. Notice that most of the airflow enters through the trailing one-third of the pads. **Where are your pads the most clogged?**

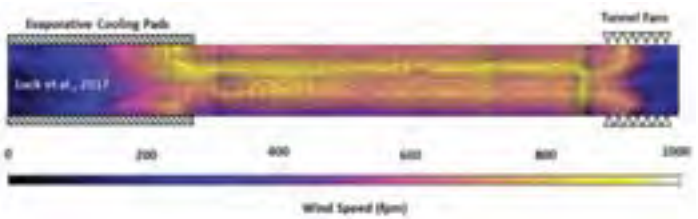
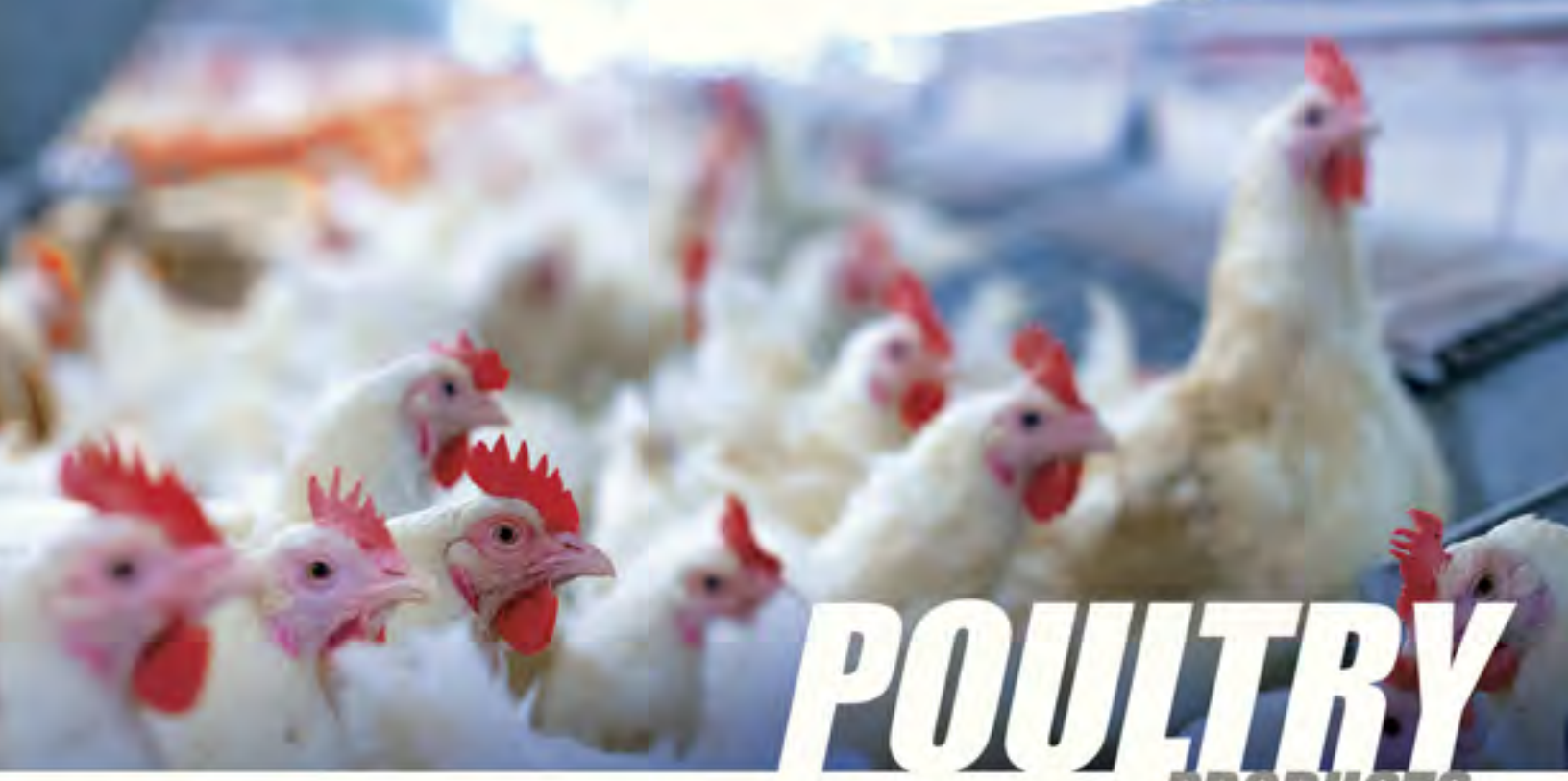


Figure 5: Measured wind speed (fpm) at bird level of a 66 x 560 ft broiler house. Air enters from the pads on the left and exits the fans on the right. Note that most airflow enters the trailing one-third of the pads nearest the fans.



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This past summer, we compared a farm that had two houses fitted with new pads and two houses with 10-year-old pads that were dirty (Edge et al., 2019). The two houses with the dirty 10-year-old pads were cleaned for a third treatment. New belts were installed for all fans. Wind speed (fpm) was measured in multiple locations inside the doghouse with the wind meter positioned 12 inches from the pad face (Fig. 6). The average wind speed for each pad treatment is also presented. The corresponding average house wind speed was measured 100 feet from the fan-end of the house (Table 1).

Wind speed measured in the doghouse for new pads was relatively uniform, with an average of 321 fpm (Fig. 6). The average house wind speed for the new pads was 584 fpm (Table 1), and the houses operated at a static pressure of 0.09 in WC. The dirty old pads had the lowest average wind speed through the pads of 299 fpm (Fig. 6). The large dip in wind speed between 25 and 30 feet corresponds with the area that most air enters, thus bringing in the most dirt and debris. With the pads restricted from debris, the average house wind speed measured 509 fpm (-13% from new) with the houses operating under increased static pressure of 0.14 in WC. The increased static pressure reduced the flow through each of his ten fans by roughly 2,000 cubic feet per minute (cfm). **He was running 10 fans and getting the output of nine fans! The grower immediately cleaned the pads on both dirty house treatments when he saw the numbers**. After cleaning, the average wind speed through the cleaned old pads improved to 313 fpm (Fig. 6). The average house wind speed measured 560 fpm (-4% from new) with houses operating under a static pressure of 0.12 in WC. **Though it took the grower 4 hours per house to clean the pads, he saw the potential benefit in improved bird environment (higher house wind speeds) and reduced power consumption (reduced static pressure).**

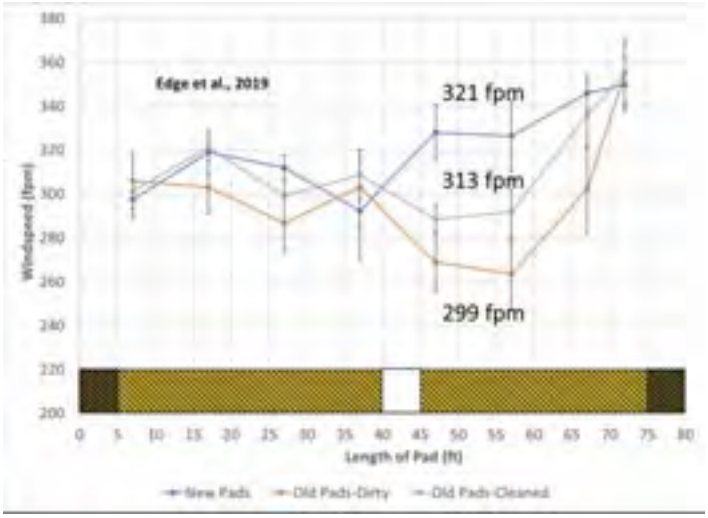

Figure 6: Wind speed (fpm) plotted along the evaporative pad length. Zero distance starts at the front-end of the house. The split pad system is illustrated to show the presence of a 5-foot wall section where the water pump was located. On each end of the tunnel opening, the tunnel curtain pockets blocked the section.

Table 1 : Average pad and house wind speeds and house static pressure for each pad treatment

Treatment	Average Pad Wind Speed fpm	Average House Wind Speed fpm	Difference %	Static Pressure in WC	Difference %
New Pads	321	584		0.09	
Old Pads (Clean)	313	560	-4	0.12	33
Old Pads (Dirty)	299	509	-13	0.14	56

[1]Mean house windspeed measured 100 ft from fan-end of house.

Evaporative cooling pads are hard to keep clean, especially for cooling systems that face the road. Spiders build webs on the inside and outside surfaces that collect dust and feathers (Fig. 7). This debris is what ultimately gets pushed/pulled into the center of the pads and lodged in the flutes. Figure 7 (left photo) shows five pads that we removed from a dirty system and stacked face to face. Over time, debris builds up in the center of the flutes. The interior flutes of each pad will have a similar accumulation. Figure 7 (right photo) shows a closer view of the debris buildup. Air may break a lot of the debris loose, but water will be needed to loosen and flush the remainder.

Figure 7: left, pads were pulled out of the system and stacked to demonstrate the debris that is pushed/pulled from the outside surface into the pad flutes. Right, view of the debris lodged midway into a single pad. (Inset, spider webs collecting dirt on the outside surface of a pad.

Regular cleaning of the pad surface debris with a soft-bristle brush will help minimize flute clogging. We have found that a 48-inch concrete finishing broom is soft but provides enough stiffness to brush the debris from the surface. The extra-wide broom allows you to remove the handle and use two hands to cover a large area both outside and inside the doghouse.

You can get the biggest payback for your time and effort by thoroughly cleaning the pads in the spring going into the summer months when evaporative cooling is most critical. You want to take your pads from Figure 3 (or worse) and get them somewhere between Figure 2 and Figure 1.

While the pads are dry, use a backpack blower or equivalent from the outside to blow as much of the loose debris

zoetis

from the pads (after each summer flock if possible). Second, get all the loose debris and dirt out of the doghouse. You may turn on your tunnel fans to assist.

Next, turn on your system and wet the pads to loosen the remaining debris stuck to the pads. Then spray the pads with a garden hose and nozzle. You need enough water flow and pressure to push the debris out of each flute without damaging the paper in the pads. It is important to hold the nozzle in line with the flutes to maximize the flow and pressure to push the debris out. If you are standing several feet from the pads and spraying level, the water will not have the energy to push the entire blockage out. You may need to make several passes to clear the blockage, one or two passes each at 45° and 15° angles. It is important to go back inside with the lights off and look for areas that may have been missed or skipped between passes.

We realize this process takes time and is tedious to do correctly. However, we believe that doing this once a year before going into the hotter months will maintain or improve your house windspeeds and reduce the static pressure your fans are operating against. Once you develop a pad debris maintenance routine, this process will become faster because you are reducing the amount of time for debris to build up. For a complete list of steps to clean the entire evaporative cooling system, download our Poultry Toolkit app on your smartphone, or go to summertime tune-up checklists (Campbell, 2010) on poultryhouse.com. We would like to thank Portacool, LLC for supplying the Kuul® evaporative cooling media.

References

Cambell, J.C., J.O. Donald and E.H. Simpson. 2010. Summertime tune-up checklists. Poultry Engineering, Economics and Management. Newsletter Issue 65, April.

Edge, C.M., J.D. Davis, J.C. Campbell, K.G. Griggs, J.L. Purswell, and D.L. Brothers. 2019. Comparison of old and new evaporative cooling pads on a commercial broiler farm. Presentation for the 2019 ASABE International Meeting. July 7-10, Boston, MA.

Luck, B.D., J.D. Davis, J.L. Purswell, A.S. Kiess, S.J. Hoff, J.W.W. Olsen. 2017. Assessing air velocity distribution in three sizes of commercial broiler houses during tunnel ventilation. Trans. ASABE. 60(4):1313-1323. doi: 10.13031/trans.12107.


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EVENT UPDATES

Legislative Omelet Breakfast CANCELLED
Initial date April 23

Spring Board Meeting CANCELLED
Initial date April 23

Bass Tournament POSTPONED (Fall 2020)
Initial date May 8

Golf Tournament POSTPONED
Initial date May 15 (Silver Lakes/Glencoe, Al.)

***Evening of Fun* POSTPONED (Initially June)**
New Date Sept. 5 (BJCC/Birmingham, AL)

Summer Board Meeting/Annual Meeting
PROCEEDING July 12-14 (Sandestin, FL)

Poultry Industry Workshop PROCEEDING
Date Sept. 29-30 (Auburn, AL)

All county and area poultry meetings have been postponed until further notice.

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